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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,596

12/22/2005

Holger Lorenz

ETF-0038

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EXAMINER

HUNNINGS, TRAVIS R

ART UNIT

PAPER NUMBER

2612

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,596	Applicant(s) LORENZ ET AL.	
	Examiner Travis R. Hunnings	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, 10, 13-18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meister et al. (Meister; US Patent 5,570,903).

Regarding claim 1, Meister discloses *Occupant And Infant Seat Detection In A Vehicle Supplemental Restraint System* that has the following claimed limitations:

The claimed occupancy sensor with at least two pressure actuable switching elements associated to a surface of a seat with a certain distance between them in such a way that a first switching element is associated to a first area of the seat and a second switch element is associated to a second area of the seat is met by the sensors being deployed in a vehicle seat as shown in figures 5 and 6;

Meister does not specifically disclose the claimed first and second switching elements are connected together in such a way as to implement a logical AND gate operation. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors (column 5, lines 6-32). It would have been obvious to one of ordinary skill in the art to use a logical AND gate operation between two sets of sensors in order to provide

Art Unit: 2612

a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to utilize a logical AND gate operation.

Regarding claim 2, Meister does not specifically disclose the claimed first and second switching elements are connected together in series. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors. It would have been obvious to one of ordinary skill in the art to connect two sets of sensors in series in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to connect the two sets of sensors in series.

Regarding claim 3, the claimed first and/or second switching elements comprising a pressure sensor is met by the sensors being tripped because of the pressure that is applied to them when a person sits down on the seat (column 5, lines 6-32).

Regarding claim 4, Meister does not specifically disclose the claimed first and/or second switching elements comprises a plurality of individual switching cells connected together in such a way as to implement a logical OR gate operation. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person

Art Unit: 2612

based on any user desired combination of inputs from the sensors (column 5, lines 6-32). It would have been obvious to one of ordinary skill in the art to use a logical OR gate operation between two sets of sensors in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to utilize a logical OR gate operation.

Regarding claim 5, Meister does not specifically disclose the claimed individual switching cells of a switch element being connected in parallel. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors (column 5, lines 6-32). It would have been obvious to one of ordinary skill in the art to connect the sensors in parallel in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to connect the sensors in parallel.

Regarding claim 6, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 9, the claimed first and second switching elements are arranged at least approximately at equal distances from a set centerline running longitudinally with respect to the vehicle and at a certain distance from each other is met by the sensors being arranged as can be seen in figure 6.

Regarding claim 10, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 13, the claim is interpreted and rejected as claim 1 stated above.

Regarding claim 14, the claim is interpreted and rejected as claim 2 stated above.

Regarding claim 15, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 16, the claim is interpreted and rejected as claim 4 stated above.

Regarding claim 17, the claim is interpreted and rejected as claim 5 stated above.

Regarding claim 18, the claim is interpreted and rejected as claim 3 stated above.

Art Unit: 2612

Regarding claim 21, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 22, the claim is interpreted and rejected as claim 9 stated above.

3. Claims 7, 11, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meister in view of Federspiel (US Patent 7,161,460).

Regarding claim 7, Meister does not specifically disclose the claimed sensor is a foil-type pressure sensor of a through-mode type. Federspiel discloses *Switching Element Provided With A Foil Construction* that teaches using a foil-type through mode pressure sensor (column 3, lines 39-51). Replacing the sensor of Meister with a known pressure sensor as taught by Federspiel would give the user a wider range of options to utilize the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister according to the teachings of Federspiel to use a foil-type through-mode pressure sensor.

Regarding claims 11, 19 and 23, the claims are interpreted and rejected as claim 7 stated above.

Art Unit: 2612

4. Claims 8, 12, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meister in view of Bieck et al. (Bieck; US Patent Application Publication 2004/0163939).

Regarding claim 8, Meister does not specifically disclose the claimed sensor is a foil-type pressure sensor of a shunt-mode type. Bieck discloses *Foil-Type Switching Element With Improved Spacer Design* that teaches using a foil-type shunt mode pressure sensor (paragraph 23). Replacing the sensor of Meister with a known pressure sensor as taught by Bieck would give the user a wider range of options to utilize the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister according to the teachings of Bieck to use a foil-type shunt-mode pressure sensor.

Regarding claims 12, 20 and 24, the claims are interpreted and rejected as claim 7 stated above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

Art Unit: 2612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRH


BENJAMIN C. LEE
PRIMARY EXAMINER